

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/564,653	01/14	1/2006	Gyoon Hee Han	DI-008	1709	
38051 KIRK HAHN	7590	12/18/2007		EXAMINER		
14431 HOLT A			FINN, MEGH		GHAN R	
SANTA ANA,	A, CA 92705			ART UNIT	PAPER NUMBER	
				1614		
				MAIL DATE	DELIVERY MODE	
			•	12/18/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Applicatio	n No.	Applicant(s)				
	10/564,65	3	HAN ET AL.				
Office Action Summary	Examiner		Art Unit				
	Meghan Fi		1614				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF TH 36(a). In no ever will apply and will , cause the appli	IS COMMUNICATION  nt, however, may a reply be tim  l expire SIX (6) MONTHS from cation to become ABANDONE	I.  lety filed  the mailing date of this communication.  D (35 U.S.C. § 133).				
Status							
1) Responsive to communication(s) filed on 14 Ja							
·—							
• —	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4) ⊠ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdray 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) ⊠ Claim(s) 1-20 are subject to restriction and/or expressions.	wn from cor						
Application Papers							
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b)[ drawing(s) b tion is require	e held in abeyance. See ed if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of: <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> <li>Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ol> </li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate				

## **DETAILED ACTION**

#### Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions, which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

The instant application contains use claims, which could be interpreted as a product, method of treating of method of preparing, and as such are grouped separately. Claims 1 and 15 are linking claims, and will be examined with whichever group is elected, and interpreted based on the group elected.

### Use interpreted as a product:

Group I, claim(s) 2-3, and 16, drawn to a compound of formula II.

Group II, claim(s) 4-6, 17, drawn to a compound of formula III.

Group III, claim(s) 7-8, 18, drawn to a compound of formula IV.

Group IV, claim(s) 9-10, 19, drawn to a compound of formula V.

Group V, claim(s) 11-13, 20, drawn to a compound of formula VI.

# Use interpreted as a method of treating:

Group VI, claim(s) 2-3, 16, drawn to a method of treating using compound of formula II.

10/564,653

Art Unit: 1614

Group VII, claim(s) 4-6, 17, drawn to a method of treating using compound of formula III:

Group VIII, claim(s) 7-8, 18, drawn to a method of treating using compound of formula IV.

Group IX, claim(s) 9-10, 19 drawn to a method of treating using compound of formula V.

Group X, claim(s) 13, 20, drawn to a method of treating using compounds of formula VI.

## Use interpreted as a method of preparing:

Group XI, claim(s) 2-3, 16, drawn to a method of preparing a composition using the compound of formula II.

Group XII, claim(s) 4-6, 17, drawn to a method of preparing a composition using the compound of formula III.

Group XIII, claim(s) 7-8, 18, drawn to a method of preparing a composition using the compound of formula IV.

Group XIV, claim(s) 9-10, 19 drawn to a method of preparing a composition using the compound of formula V.

There is no special or common technical feature between all groups, because the special technical feature of a composition claim is the compound itself, while the special technical feature of a method claim is the interaction between the compound and a receptor or body to which it is administered. The special technical feature in a method of preparing is the interaction between chemicals involving in making the composition, and as such is different than both of the special technical features of the compound and method of treating claims. Within the product groupings (groups I-V), there is not special technical feature because the core structure of the compounds vary between each group.

10/564,653

Art Unit: 1614

Changing the ring size from 5 to 6 to 7 carbons drastically effects the composition as well as the large differences between the A1 and A2 groups (claim 1), such structural differences would create different core structures and as such there is no special or technical common feature between groups I-V. Since there is a lack of unity between the compositions and there is a lack of unity between a method of treating, method of preparing, and a composition, there is a lack of unity between groups I-XIV and thus restriction is proper.

This application also contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1. Despite the groupings based on core structure as discussed above, there is still quite a large variation of structures within each group. As different functional groups affect the compound and its effectiveness, a different search is required for each. Additionally, multiple types of cancer have been claimed, and given the large differences between cancers such as prostate cancer and skin cancer, those species also have different search and examination requirements and as such have a lack of unity of invention.

Regardless of which group is elected, applicant must elect a single disclosed species consisting of 1 compound used in which all variables and R groups have been specified.

10/564,653

Art Unit: 1614

If a method of treating is elected (groups VI-X), then the applicant must elect a species consisting of a single disclosed specie of cancer disease such as those listed in claims 15-20.

Applicant is reminded that a single <u>disclosed</u> species must be elected.

Thus any compound that is elected will be considered new matter if it has not been specifically disclosed in the specification.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the

10/564,653

Art Unit: 1614

restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103 (a) of the other invention.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. <u>All</u> claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be

10/564,653

Art Unit: 1614

maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

10/564,653

Art Unit: 1614

Page 8

free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-

9199 (IN USA OR CANADA) or 571-272-1000.

Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Meghan Finn whose telephone number is

(571) 270-3281. The examiner can normally be reached on 7:30am-5pm Mon-

Thu, 7:30am-4pm Friday (EST).

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The

fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300.

Meghan Finn

SUPERVISORY PATENT EXAMINER